Prescribed Burn Plan for Devou Park Sleepy Hollow Field
Covington, Kentucky
March 2015

PRESCRIBED BURN PLAN for Devou Park Sleepy Hollow Field, 2015

Preserve/Site: ___ Devou Park Sleepy Hollow Field in Covington__

Burn Unit: __3.8 Acres Native Grasses_____

Land Owner:
Name: _____ _____
Signature *Date*

1. **LOCATION:** **Devou Park Sleepy Hollow Field,**
1700 Montague Rd
Covington, KY 41011

SOURCES OF EMERGENCY ASSISTANCE (location & phone #):

911, Independence/Ludlow/Park Hills/Covington Fire Departments, Covington Police

3. OFFICIAL NOTIFICATIONS:

__**X**___ Call Covington Fire Department. Spoke with **_Chief Dan Mathew and Battalion Chief Eric Mathieni** __ on **_3/20/2015**
___X__ Covington Fire Dept. Contacted Ludlow Fire Dept. Spoke with: Chief Dreyer
___X__ Covington Fire Dept. Contacted Park Hills Fire Dept.Chief Rigney
___X__ Called Covington/Parkhills/Ludlow Dispatch
___X__ Called Independence Fire Dep. Spoke with: Chief Armstrong on 3/23/14
__ X__ Called Fish and Wildlife Spoke with: Clay Smitson on 3/20/2015
__**X**__ Called KY Division of Forestry Spoke with: Matt Haywood on 3/23/2015 at 8:30 a.m.
_____ Call all parties back after burn

4. CREW ORGANIZATION

Burn Boss: Jason Roberts
Crew Boss: Crystal Courtney
Crew Members:

Urban Forestry Staff – 1 on drip torch, 2 with flappers, 2 with backpack sprayers, 1 in gator with tank, 2 handling traffic concerns (if we can't enlist police help).

Fire Department/Police Department –1onsite emergency manager watching smoke accumulation and working with police to shut down the road (Covington police-Ronnie Allen) as needed.

Vehicles: Ludlow Fire Department/utilizing Walton Verona Brush Truck, 2 ATVs with

0807) one with 250 gal tank with pump, one with 300 gallon spray tank
Equipment: two drip torches, 2 flappers, 2 backpack sprayer, 2 ATVs with tank sprayers, 2 pickup trucks with sprayers, 6 walkie-talkies, men working signs at both ends of Sleepy Hollow.

5. PLANNING AND MANAGING THE BURN (Describe each of the following):

Firebreak preparations: All lines are short mowed fire breaks and or vehicle lanes. These lines have been disked in order to expose soil and retard flame movement.

Reason for burn:
Prescribed fire will be used at the Devou Park Sleepy Hollow Field for a 3.8 acre parcel of native grasses and forbs. Burning this area will help with the management of this grassland community by reducing invasion of trees and shrubs, removal of excess leaf litter that can inhibit vegetative growth and wildlife use, release seed for germination and controlling disease.

Weather Conditions:
Weather conditions are critical for the effectiveness and safety of prescribed fire. Wind speed and direction is the first condition to consider, followed by relative humidity, temperature, fine fuel moisture, atmospheric stability, rainfall and soil moisture.

- Ideal transport wind speed, or wind measured at 20 feet above ground level, should range from 6 to 18 mph for smoke dispersion. This is the wind speed that is usually given by your local weather center. Surface wind, or wind speed at eye level, should range from 1 to 3 mph.
- Relative humidity is the proportion of moisture in the air, to the maximum amount of moisture the air is capable of holding at the same temperature and pressure if it were saturated. Relative humidity should range from 30% to 50% for a prescribed burn. · The temperature for a late winter to an early spring burn should range from 20 to 60 degrees Fahrenheit.
- Soil moisture should be ideal if you have received a 1/2" or greater rainfall within 1 to 3 days prior to the burn depending on previous conditions. This is important to prevent rapid spreading of fire and permanent damage to the soil and the microorganisms that help maintain soil composition.
- Ideal fine fuel moisture (FFM) ranges from 10 to 20%. This is directly controlled by relative humidity (RH), rainfall & soil moisture. A rough estimate can be obtained by taking the relative humidity and dividing it by 2: (RH ¸ 2 = FFM).
- Atmospheric stability is the resistance of the atmosphere to vertical movement. Unstable atmospheric conditions are preferred. Such conditions promote rapid smoke dispersion but, if severe, can make fire control difficult. Indicators of unstable conditions include wind gusts, clear skies, and sometimes dust devils. Stable atmospheric conditions can cause severe smoke problems. Indicators of stable conditions include haze, layered clouds, and no wind or very steady low wind.

Topography:
Topography, or the lay of the land, is also a major influence of fire behavior. There are three main considerations regarding topography: aspect, slope and terrain.

- Aspect is the direction a slope faces. This determines the amount of heating it gets from the sun and the amount, condition and type of fuels present. South and southwest slopes are normally most critical.
- Slope is the degree of incline of a hillside, and determines the rate at which a fire burns. Fires

- Terrain is the shape of the land and has major effects on fire behavior. Narrow canyons are conducive to the spread of fire to the opposite side by radiation and spotting.

Firing techniques and ignition pattern:
The burn is scheduled for Monday, March 30th. The grasses to be burned are of moderate thickness but somewhat sparse in some areas. The topography is sloping toward the road from the wood line. There are woodlands along the East and south side of the property.(see Map) Fire lines will be closely mowed approximately 12 feet wide and plowed approximately 8 feet wide on the east, and south side of the parcel to be burned. The roads to the north, west and along the center of the parcel will act as a fire break. The site will be closely evaluated on the day of the burn including wind speed, humidity and soil moisture.

The site will be divided into four units to be burned separately. On all units we will initiate the backing fire along the woodlands on the uphill and down-wind side or North of the unit. One crew will proceed from a pre-determined starting point to establish the black line working slowly and keeping in contact. Once a sufficient black line is in place at least 40 feet wide then a heading fire can be started on the upwind side. The two crews will proceed along their flanks and keep in communication so one group does not get too far ahead of the other. The upwind head fire will start after the crew boss and burn boss communicate.

Smoke Management:
The site to be burned is in a fairly isolated area with very few neighbors although anyone near the area will be contacted. The City of Ludlow is approximately .5 miles from the burn site. Weather forecasts will be reviewed before the burn for management purposes. We will comply with all air pollution regulations. The area to be burned is relatively small and the fuel is not heavy. Smoke is not expected to be thick. The forecast for wind direction and speed for Monday, March 30 is wnw 12 MPH – gust of 20 MPH. This should carry any smoke away from Ludlow and should be good for rapid dispersal. The forecast and site conditions will be reviewed at the time of the burn.

PRE-BURN CHECKLIST AND CREW BRIEFING

Landowner: **City of Covington** **Fire Unit:** **3.8 Acres Native Grasses** **Date:** **3/30/2015**

A. PRIOR TO CREW BRIEFING
Fire Unit is as described in plan.
Required firebreaks complete.
Permission obtained.
Official and neighbor notifications complete.
Required equipment is on-site and functioning.
Planned ignition and containment methods are appropriate.
List of emergency phone numbers are in each vehicle.
Planned contingencies and mop-up are appropriate.

B CREW BRIEFING
Each crew member has a burn unit map.
Fire Unit size and boundaries discussed.
Fire Unit hazards discussed.
Purpose of burn.

Crew appears experienced and mature enough to be safe.
Review organization of crew and assignments.
Review methods of igniting and containing the fire and any mop-up issues.
Review communications between crew, contact with the public; traffic concerns.
Location of vehicles, keys, and nearest phone.
Location of back-up equipment, supplies, and water.
Review all contingencies including escape routes.
Review mop-up procedures.
Answer questions from crew.
Give crew members the opportunity to decline participation.

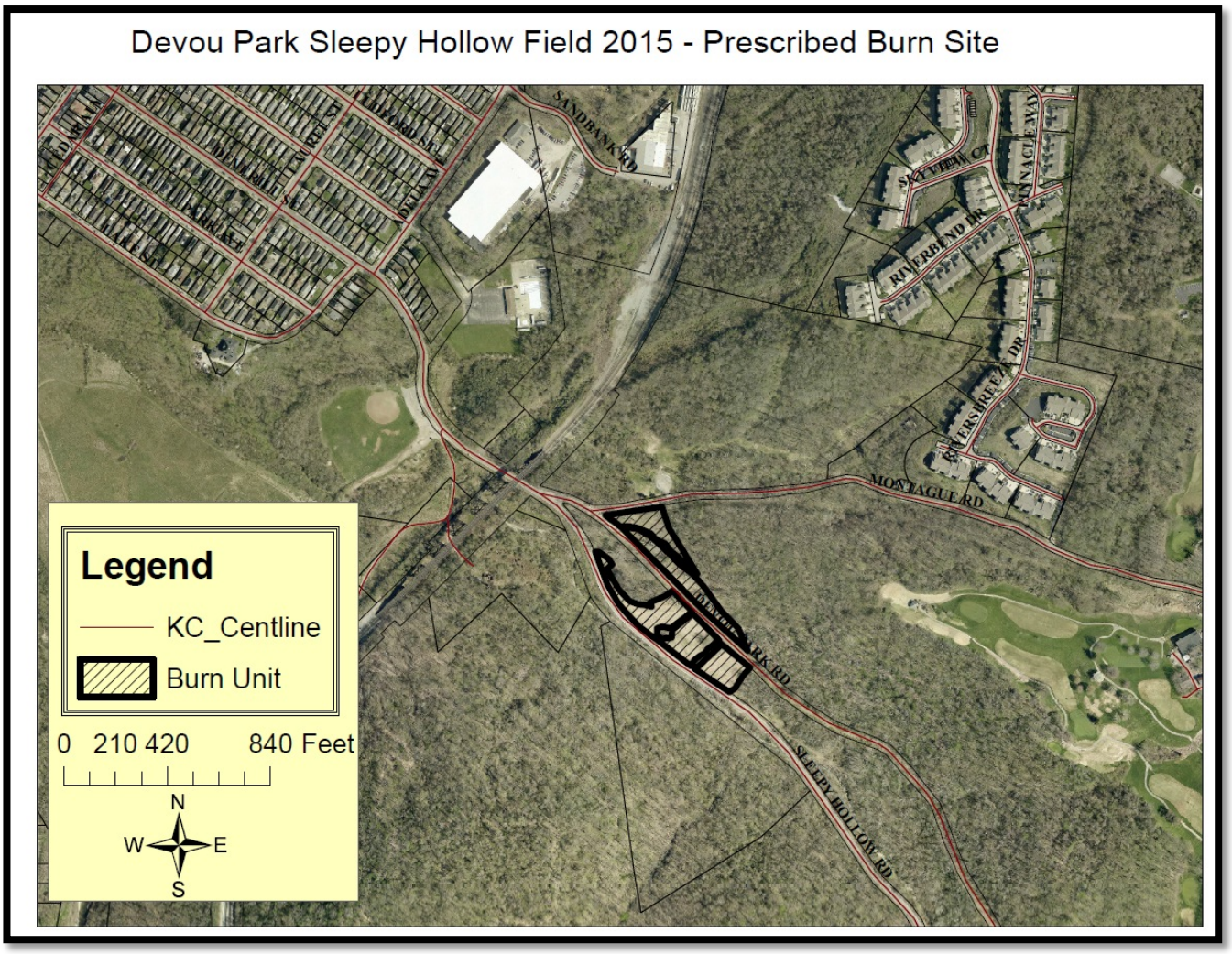
C. PRIOR TO IGNITION

Weather and fuel conditions are within prescription.
Weather forecast, obtained within two hours of ignition, says prescribed weather will hold for two hours past expected duration of burn.
Crew members have required protective clothing.
Crew members in place to shut down road as needed.
Crew members have matches.
Conduct test burn.

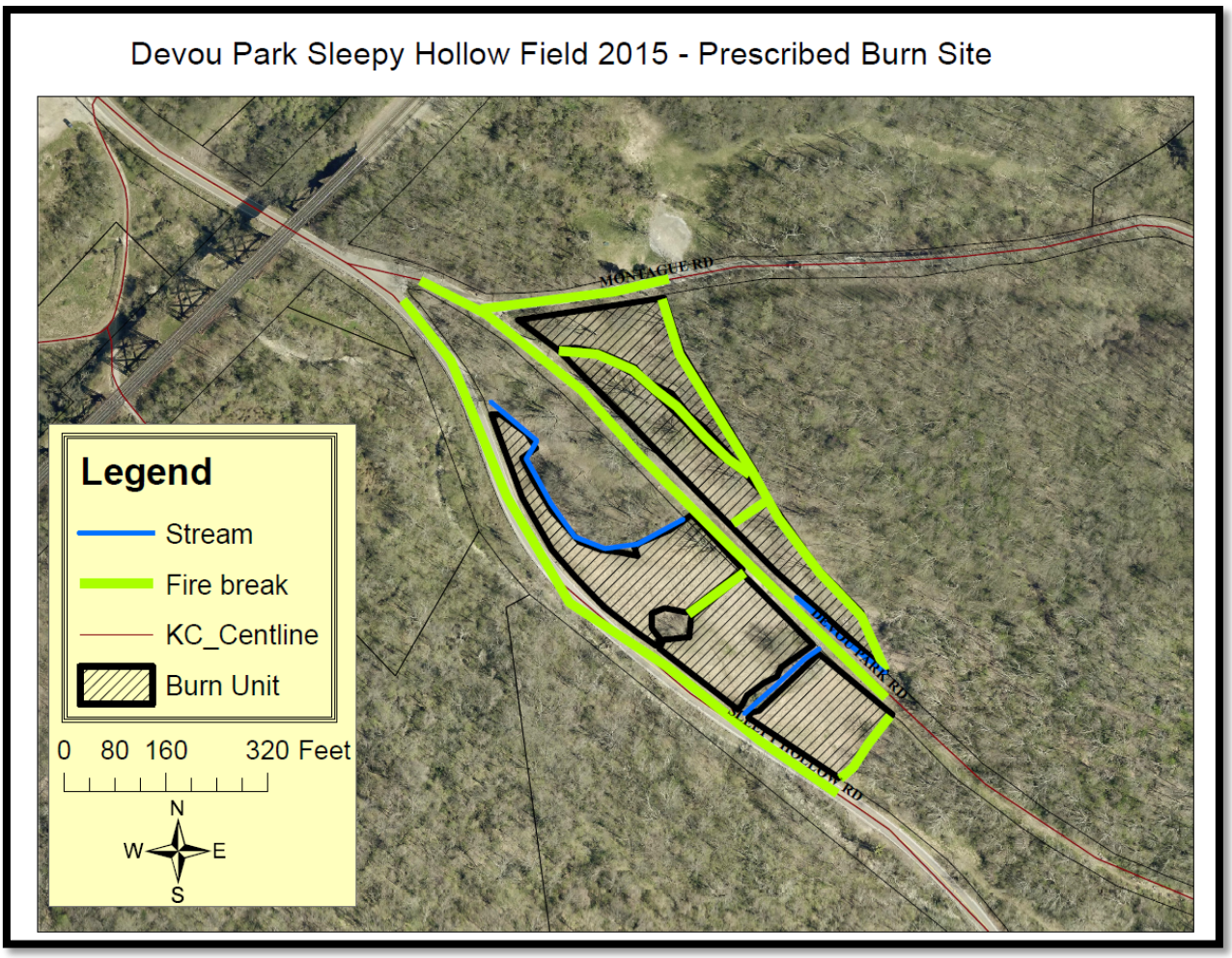
D. BEFORE LEAVING BURN UNIT

Mop-up completed as described in prescription.
Next morning inspection arranged.
Notifications of all parties of completed burn.

Map #1: shows burn unit, area surrounding, hazards, north arrow



Map #2: shows the burn unit with fire breaks


Devou Park Sleepy Hollow Field 2015 - Prescribed Burn Site
MONTAGUE RD
DEVOU PARK RD
Legend
Stream
Fire break
KC_Centline
Burn Unit
0 80 160 320 Feet
N
W
E
S